

We claim:

1. A carpet backing comprising a woven fabric having a flat weave construction of warp tapes and multifilament picks with an average of about 12 to about 24 warp tapes per inch providing 50 to about 100% theoretical warp coverage but less than full effective warp coverage and with an average of about 10 to about 20 multifilament picks per inch, such that the fabric has a weight of about 1.5 to about 7 osy and average air permeability of at least about 250 ft³/min./ft.², determined according to ASTM D-737 with a pressure differential equal to 0.5 inch water
2. The carpet backing of claim 1 wherein the warp tapes comprise polypropylene and have widths of about 40 to about 100 mils.
3. The carpet backing of claim 2 wherein the picks have deniers of about 1000 to about 2500 g/9000 m.
4. The carpet backing of claim 3 wherein the average pick count is about 13 to about 18 picks per inch.
5. The carpet backing of claim 1 wherein theoretical warp coverage is about 55 to about 90%.
6. The carpet backing of claim 5 wherein the average warp count is about 13 to about 18 tapes per inch and the average pick count is about 13 to about 17 picks per inch.
7. The carpet backing of claim 6 wherein the multi-filament picks are spun yarns.
8. The carpet backing of claim 1 wherein the flat weave construction is a plain weave.
9. The carpet backing of claim 1 wherein the flat weave construction is a twill weave.
10. A carpet comprising a primary backing structure having a plurality of tufts comprising face yarn extending therefrom on a pile side and a plurality of stitches comprising face yarn disposed on a stitched side opposite the pile side, and a secondary backing laminated to the stitched side with a cured binder, wherein the secondary backing comprises a woven fabric having a flat weave construction of warp tapes and multifilament pick yarns with an average of about 12 to about 24 warp tapes per inch providing 50 to about

100% theoretical warp coverage but less than full effective warp coverage and with an average of about 10 to about 20 multifilament picks per inch, such that the fabric has a weight of about 1.5 to about 7 osy and average air permeability of at least about 250 ft³/min./ft.² determined according to ASTM D-737 with a pressure differential equal to 0.5 inch water.

11. The carpet of claim 10 wherein the warp tapes of the secondary backing comprise polypropylene and the tapes are about 40 to about 100 mils wide.

12. The carpet of claim 11 wherein the picks comprise polypropylene filaments and have deniers of about 1000 to about 2500 g/9000 m.

13. The carpet of claim 12 wherein the secondary backing has an average pick count of about 13 to about 17 picks per inch and an average warp count of about 12 to about 20 tapes per inch, provided that when the average warp count is 18 tapes per inch or greater, the average pick count is about 15 picks per inch or fewer.

14. The carpet of claim 13 wherein the secondary backing has a plain weave construction.

15. The carpet of claim 13 wherein the secondary backing has a twill weave construction.

16. The carpet of claim 10 having warpwise and fillwise retained stress of at least 30 lbs. at constant strain and 73°F and 50% relative humidity 16 hours after initial strain from a 100 pound load.

17. The carpet of claim 10 wherein the primary backing comprises a woven polypropylene backing having a closed weave.

18. In a process for making a carpet comprising steps comprising tufting a primary backing structure with at least one face yarn to form a plurality of tufts on a pile side of the primary backing structure and a plurality of stitches on a stitched side opposite the pile side, contacting the stitched side and a secondary backing with a binder and curing the binder in contact with the stitched side and the secondary backing to laminate the secondary backing to the stitched side, the improvement wherein the secondary backing is a carpet backing according to claim 1.

19. The process of claim 18 wherein curing of the binder in contact with the stitched side and the secondary backing comprises heating at about 300 to about 350°F for about 1 to about 6 minutes.

20. The process of claim 18 wherein the secondary backing has an average warp count of about 12 to about 18 tapes per inch, an average pick count of about 12 to about 20 picks per inch and average air permeability of about 300 to about 800 ft³/min./ft.².